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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,685	07/09/2003	Navin B. Shah	A01304	9809

21898 7590 06/01/2006

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PATENT DEPARTMENT
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EXAMINER

TOSCANO, ALICIA

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/615,685

Applicant(s)

SHAH ET AL.

Examiner

Alicia M. Toscano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 7-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claims 7-11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on April 19 2006.

Applicant's election with traverse of Claims 7-10 in the reply filed on 4/9/2006 is acknowledged. The traversal is on the ground(s) that searching the method of Group II and the composition of Group I would not put an undue burden on the examiner. This is not found persuasive because Group I and Group II are distinct groups. Examination of two distinct groups would create undue burden on the examiner

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by O'Keefe. As required in Claim 1, O'Keefe (US Patent No. 6,184,311 B1) discloses a powder coating composition consisting of 10-40% of a semi-crystalline carboxylic acid functional polyester component, 60-90% of an amorphous polyester component, a

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curing agent, (Columns 2 Lines 54-67, Column 3 Lines 1-5) and an epoxy-functional curing agent (Column 7 Lines 1-6). The total cure time is between 12-20 minutes (See examples).

O'Keefe further discloses the epoxy-functional curing agent to be triglycidylisocyanurate (Column 7 Lines 51-54), as required in Claim 4.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Keefe in view of Pietila et al. (Polymer, 41, 2000, 8283-8290) O'Keefe discloses the elements of the invention as discussed above. O'Keefe does not use a non blooming agent (2-n-butyl-2-ethyl-1,3-propanediol) as part of the amorphous component in the resin. Pietila

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teaches the use of 2-butyl-2-ethyl-1,3-propanediol as a monomer that decreases the formation of cyclic dimers. Cyclic dimers are known to migrate to the coating surface, causing blooming. It would be obvious to one skilled in the art to include in the amorphous component of O'Keefe 2-butyl-2-ethyl-1,3-propanediol, as taught by Pietila, in order to decrease blooming.

4. Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over O'Keefe in view of Decker (US Patent No. 6,025,030). O'Keefe includes elements of the invention as discussed above. O'Keefe also discloses the use of isophthalic acid, or "asymmetrically substituted aromatic polyacid", as a component of the semicrystalline resin (Column 5 Line 2). O'Keefe does not include the use of 10-50% of said isophthalic acid. Decker discloses the use of up to 10 wt-% of a carboxylic acid (Column 4 Line 20) such as isophthalic acid (Column 4 Line 38). It would be obvious to one skilled in the art to include in O'Keefe the use of an asymmetrically substituted aromatic polyacid to tailor the flexibility of the resin, as taught by Decker.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Keefe in view of Daly (US Patent No. 6,294,610 B1). O'Keefe includes elements of the invention as discussed above. O'Keefe also discloses the use of quaternary phosphonium salts as the catalyst for the curing agent. O'Keefe does not specify which salts to use. Daly discloses the use of specific catalysts for the reaction between an epoxy resin and a carboxylic acid functional polymer including phosphonium-tetra-substituted borates, arsonium-tetra-substituted borates, ammonium-tetra-substituted borates and imidazole-tetra-substituted borates. It would be obvious to one skilled in

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the art at the time of the invention to use one of these catalysts, as taught by Daly, to provide low temperature curing.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Keefe in view of Decker and Daly. O'Keefe, Decker and Daly include the elements discussed above. It would have been obvious to one skilled in the art at the time of the invention to include in O'Keefe the elements of Decker and Daly to obtain a flexible, fast curing polyester resin.

Conclusion

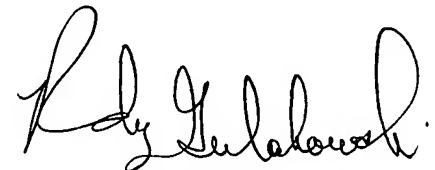
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Toscano whose telephone number is 571-272-2451. The examiner can normally be reached on Monday to Friday 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AMT

A handwritten signature in black ink, appearing to read "Randy Gulakowski".

RANDY GULAKOWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700